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Substitute for form 1449B/PTO				<i>Complete If Known</i>	
<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b> <i>(use as many sheets as necessary)</i>				Application Number	10/052,005
Sheet	1	of	5	Filing Date	January 17, 2002
				First Named Inventor	Chen, Zhijian J.
				Group Art Unit	1652
				Examiner Name	Patterson, Charles, L., Jr.
				Attorney Docket Number	MPI96-031CP1DV1CPACN1M

OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS					
Examiner Initials*	Cite No. <sup>1</sup>	Include the name of the author (In CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.			
CP	A3 ✓	Amason, T. and Ellison, M.J., "Stress resistance In Saccharomyces cerevisiae is strongly correlated with assembly of a novel type of multiubiquitin chain", Molecular and Cell Biology, Volume 14, Number 12, pages 7876-7883 (1994)			T <sup>2</sup>
	A5 ✓	Auphan, N., et al., "Immunosuppression by Glucocorticoids: Inhibition of NF- $\kappa$ B Activity Through Induction of I $\kappa$ B Synthesis" Science, Volume 270, pages 286-290 (1995)			
	A6 ✓	Baeuerle, P. and Henkel, T., "Function and Activation of NF- $\kappa$ B in the Immune System", Annual Review of Immunology, Volume 12, pages 141-179 (1994)			
	A11 ✓	Blank, J., et al., "Molecular Cloning of Mitogen-activated Protein/ERK Kinase Kinases (MEKK) 2 and 3", The Journal of Biological Chemistry, Volume 271, Number 10, pages 5361-5368 (1996)			
	B1 ✓	Chen, P., et al., "Multiple Ubiquitin-Conjugating Enzymes Participate in the In Vivo Degradation of the Yeast MAT $\alpha$ 2 Repressor", Cell, Volume 74, pages 357-369 (1993)			
	B4 ✓	Chen, Z., et al., "A 25-Kilodalton Ubiquitin Carrier Protein (E2) Catalyzes Multiubiquitin Chain Synthesis via Lysine 48 of Ubiquitin", The Journal of Biological Chemistry, Volume 265, Number 35, pages 21835-21842 (1990)			
	B5 ✓	Choi, K., et al., "Ste5 Tethers Multiple Protein Kinases in the MAP Kinase Cascade Required for Mating in S. cerevisiae", Cell, Volume 78, pages 499-512 (1994)			
	B7 ✓	Derijard, B., et al., "Independent Human MAP Kinase Signal Transduction Pathways Defined by MEK and MKK Isoforms" Science, Volume 267, pages 682-685 (1995)			
	B8 ✓	Derijard, B., et al., "JNK1: A Protein Kinase Stimulated by UV Light and Ha-RAS That Binds and Phosphorylates the c-Jun Activation Domain", Cell, Volume 76, pages 1025-1037 (1994)			
CP	B11 ✓	DiDonato, J., et al., "Phosphorylation of I $\kappa$ B $\alpha$ Precedes but Is Not Sufficient for Its Dissociation from NF- $\kappa$ B", Molecular and Cellular Biology, Volume 15, Number 3, pages 1302-1311 (1995)			

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Sheet	2	of	5	Filing Date	January 17, 2002
				First Named Inventor	Chen, Zhijian J.
				Group Art Unit	1652
				Examiner Name	Patterson, Charles L., Jr.
				Attorney Docket Number	MP198-031CP1DV1CPACN1M

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CH	B13 ✓	Finco, T., et al., "Inducible phosphorylation of IκBα is not sufficient for its dissociation from NF-κB and is inhibited by protease inhibitors", Proceedings of the National Academy of Sciences USA, Volume 91, pages 11884-11888 (1994)			T <sup>2</sup>
CH	B15 ✓	Finco, T., et al., "Mechanistic Aspects of NF-κB Regulation: The Emerging Role of Phosphorylation and Proteolysis", Immunity, Volume 3, pages 263-272 (1995)			
CH	B16 ✓	Francis, S. and Corbin, D., "Structure and Function of Cyclic Nucleotide-Dependent Protein Kinases" Annual Review of Physiology, Volume 56, pages 237-272 (1994)			
CH	B18 ✓	Goldberg, A., "Functions of the Proteasome: The Lysis at the End of the Tunnel", Science, Volume 268, pages 522-523 (1995)			
CH	C1 ✓	Gupta, S., et al., "Transcription Factor ATF2 Regulation by the JNK Signal Transduction Pathway", Science, Volume 267, pages 389-393 (1995)			
CH	C2 ✓	Haskill, S., et al., "Characterization of an Immediate-Early Gene Induced in Adherent Monocytes That Encodes IκB-like Activity", Cell, Volume 65, pages 1281-1289 (1991)			
CH	C4 ✓	Hershko, A. and Heller, H., "Occurrence of a Polyubiquitin Structure in Ubiquitin-Protein Conjugates", Biochemical and Biophysical Research Communications, Volume 128, Number 3, pages 1079-1086 (1985)			
CH	C6 ✓	Hibi, M., et al., "Identification of an oncoprotein- and UV-responsive protein kinase that binds and potentiates the c-Jun activation domain" Genes and Development, Volume 7, pages 2135-2148 (1993)			
CH	C7 ✓	Higgins, K., et al., "Antisense inhibition of the p65 subunit of NF-κB blocks tumorigenicity and causes tumor regression", Proceedings of the National Academy of Sciences USA, Volume 90, pages 9901-9905 (1993)			

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Sheet	3	of	5	Attorney Docket Number MPI98-031CP1DV1CPACN1M

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<i>CH</i>	C8 ✓	Hirano, M., et al., "MEK Kinase Is Involved in Tumor Necrosis Factor $\alpha$ -Induced NF- $\kappa$ B Activation and Degradation of I $\kappa$ B- $\alpha$ ", The Journal of Biological Chemistry, Volume 271, Number 22, pages 13234-13238 (1996) <i>271</i>	
	C11 ✓	Lange-Carter, C.A., et al., "A Divergence in the MAP Kinase Regulatory Network Defined by MEK Kinase and Raf", Science, Volume 260, pages 315-319 (1993)	
	C13 ✓	Lin, Y.-C., et al., "Activation of NF- $\kappa$ B requires proteolysis of the inhibitor I $\kappa$ B- $\alpha$ : Signal-induced phosphorylation of I $\kappa$ B- $\alpha$ alone does not release active NF- $\kappa$ B", Proceedings of the National Academy of Sciences USA, Volume 92, pages 552-556 (1995)	
	C15 ✓	Mellits, K.H., et al., "Proteolytic degradation of MAD3 (I $\kappa$ B $\alpha$ ) and enhanced processing of the NF- $\kappa$ B precursor p105 are obligatory steps in the activation of NF- $\kappa$ B", Nucleic Acids Research, Volume 21, Number 22, pages 5059-5066 (1993)	
	C16 ✓	Miyamoto, S., et al., "Tumor necrosis factor $\alpha$ -induced phosphorylation of I $\kappa$ B $\alpha$ is a signal for its degradation but not dissociation from NF- $\kappa$ B", Proceedings of the National Academy of Sciences USA, Volume 91, pages 12740-12744 (1994)	
	D5 ✓	Read, M.A., et al., "The Proteasome Pathway is Required for Cytokine-Induced Endothelial-Leukocyte Adhesion Molecule Expression", Immunity, Volume 2, pages 493-506 (1995)	
	D10 ✓	Siebenlist, U., et al., "Structure, Regulation and Function of NF- $\kappa$ B", Annual Review of Cell Biology, Volume 10, pages 405-455 (1994)	
	D12 ✓	Thanos, D. and Maniatis, T., "NF- $\kappa$ B: A Lesson in Family Values", Cell, Volume 80, pages 529-532 (1995)	
<i>CH</i>	D13 ✓	Thevenin, C., et al., "Induction of Nuclear Factor- $\kappa$ B and the Human Immunodeficiency Virus Long Terminal Repeat by Okadaic Acid, a Specific Inhibitor of Phosphatases 1 and 2A", New Biologist, Volume 2, Number 9, pages 793-800 (1990)	

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Sheet	4	of	5	Filing Date	January 17, 2002
				First Named Inventor	Chen, Zhijian J.
				Group Art Unit	1652
				Examiner Name	Patterson, Charles L., Jr.
				Attorney Docket Number	MP196-031CP1DV1CPACN1M

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CH	D15 ✓	Traenckner, E.B., et al., "Phosphorylation of Human IκB-α on Serines 32 and 36 Controls IκB- α Proteolysis and NF-κB Activation in Response to Diverse Stimuli", The EMBO Journal, Volume 14, Number 12, pages 2876-2883 (1995)	
CH	E3 ✓	Yang, Y.-L., et al., "Deficient signaling in mice devoid of double-stranded RNA-dependent protein kinase", The EMBO Journal, Volume 14, Number 24, pages 6095-6106 (1995)	
	F1 ✓	Xu, S., et al., "Cloning of rat MEK kinase 1 cDNA reveals an endogenous membrane-associated 195-kDa protein with a large regulatory domain", Proceedings of the National Academy of Sciences USA, Volume 93, pages 5291-5295 (1996)	
	F2 ✓	Khoshnani, A., et al., "The Physical Association of Protein Kinase Cθ with a Lipid Raft-Associated Inhibitor of κB Factor Kinase (IKK) Complex Plays a Role in the Activation of the NF-κB Cascade by TCR and CD28 <sup>1</sup> ", The Journal of Immunology, Volume 165, pages 6933-6940 (2000)	
	F3 ✓	DiDonato, J.A., et al., "A Cytokine-responsive IκB kinase that Activates the Transcription Factor NF-κB", Nature, Volume 388, pages 548-554 (August 1997)	
	F4 ✓	Miller, B.S. and Zandi, E., "Complete Reconstitution of Human IκB Kinase (IKK) Complex in Yeast", The Journal of Biological Chemistry, Volume 276, Number 39, pages 36320-36326 (September 28, 2001)	
	F5 ✓	Fu, D.-X., et al., "Human T-lymphotropic Virus Type I Tax Activates I-κB Kinase by Inhibiting I-κB Kinase-associated Serine/Threonine Protein Phosphatase 2A", The Journal of Biological Chemistry, Volume 278, Number 3, pages 1487-1493 (January 17, 2003)	
	F6 ✓	Storz, P. and Toker, A., "Protein kinase D mediates a stress-induced NF-κB Activation and Survival Pathway", The EMBO Journal, Volume 22, Number 1, pages 109-120 (2003)	
CH	F7 ✓	Yang, J., et al., "The Essential Role of MEKK3 in TNF-induced NF-κB Activation", Nature Immunology, Volume 2, Number 7, pages 620-624 (July 2000)	

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Sheet	5	of	5	Filing Date	January 17, 2002
				First Named Inventor	Chen, Zhiqian J.
				Group Art Unit	1652
				Examiner Name	Patterson, Charles L., Jr.
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CP	F8 ✓	Zhao, Q. and Lee, F.S., "Mitogen-activated Protein Kinase/ERK Kinase Kinases 2 and 3 Activate Nuclear Factor- $\kappa$ B through I $\kappa$ B Kinase- $\alpha$ and I $\kappa$ B Kinase- $\beta$ ", The Journal of Biological Chemistry, Volume 274, Number 13, pages 8355-8358 (March 26, 1999)	
	F9 ✓	Tojima, Y., et al., "NAK Is an I $\kappa$ B kinase-activating kinase", Nature, Volume 404, pages 778-782 (April 13, 2000)	
	F10 ✓	Wang, C., et al., "TAK1 is a Ubiquitin-dependent kinase of MKK and IKK", Nature, Volume 412, pages 346-351 (July 19, 2001)	
	F11 ✓	Regnier, C.H., et al., "Identification and Characterization of an I $\kappa$ B Kinase", Cell, Volume 90, pages 373-383 (July 25, 1997)	
CP	F12 ✓	Connelly, M.A. and Marcu, K.B., "CHUK, A New Member of the Helix-loop-helix and Leucine Zipper Families of Interacting Proteins, Contains a Serine-Threonine Kinase Catalytic Domain", Cellular and Molecular Biology Research, Volume 41, Number 6, pages 537-549 (1995)	

Examiner Signature	<i>Charles Patterson</i>	Date Considered	<i>9/17/03</i>
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